

AMENDMENTS TO THE CLAIMS

Please replace all previous versions of the claims with the following listing:

1. (Currently Amended) A pressure sensor comprising:
a housing with a bottom part and a sidewall extending upwardly and forming an opening in an upper surface of the housing[[,]];
a pressure sensing arrangement[[,]]; and
a membrane covering the opening to provide a substantially closed cavity in the housing[[,]];
wherein the housing ~~includes~~comprises~~an~~ a substantially plate-shaped intermediary member attached between the bottom part and the membrane and ~~comprising~~having an aperture extending therethrough, the aperture forming at least a part of the cavity.
2. (Previously Presented) The sensor according to claim 1, wherein the intermediary member forms the sidewall of the cavity.
3. (Previously Presented) The sensor according to claim 1, wherein the aperture has a profile matching a profile of the pressure sensing arrangement when viewed in the same cross-sectional plane.
4. (Previously Presented) The sensor according to claim 1, wherein the intermediary member and the bottom part are joined in matching plane surfaces.
5. (Previously Presented) The sensor according to claim 1, wherein the intermediary member is attached to the bottom part by welding.
6. (Previously Presented) The sensor according to claim 1, wherein the membrane is fastened to the intermediary member.
7. (Currently Amended) The sensor according to claim 1, wherein the intermediary member is made ~~from a plate-shaped material~~ in a stamping process.

8. (Currently Amended) ~~The sensor according to claim 1,~~ A pressure sensor comprising:

a housing with a bottom part and a sidewall extending upwardly and forming an opening in an upper surface of the housing;

a pressure sensing arrangement; and

a membrane covering the opening to provide a substantially closed cavity in the housing;

wherein the housing comprises an intermediary member attached between the bottom part and the membrane and comprising an aperture forming at least a part of the cavity; and

wherein a channel for filling the cavity with a pressure-transmitting medium, the channel being formed between extends through the housing bottom part and the intermediary member.

9. (Previously Presented) The sensor according to claim 1, wherein the membrane is attached to a first contact flange of an upper surface of the intermediary member, the first contact flange forming a circumferentially extending elevation of the upper surface.

10. (Currently Amended) ~~The sensor according to claim 9, further~~ A pressure sensor comprising:

a housing with a bottom part and a sidewall extending upwardly and forming an opening in an upper surface of the housing;

a pressure sensing arrangement; and

a membrane covering the opening to provide a substantially closed cavity in the housing;

wherein the housing comprises an intermediary member attached between the bottom part and the membrane and comprising an aperture forming at least a part of the cavity;

wherein the membrane is attached to a first contact flange of an upper surface of the intermediary member, the first contact flange forming a circumferentially extending elevation of the upper surface; and

wherein a supporting ring is attached to an outer surface of the membrane, the supporting ring having a second contact flange [[of]]on a lower surface of the

supporting ring, the second contact flange being attached to ~~[[an]]~~the outer surface of the membrane above the first contact flange, the second contact flange forming a circumferentially extending elevation of the lower surface.

11. (Currently Amended) A method of making a pressure sensor, the method comprising: ~~a housing with a cavity having an opening in an upper surface of the housing, a pressure sensing arrangement placed in the cavity for sensing pressure, and a membrane covering the opening and attached to the housing to provide a substantially closed space in the cavity, wherein~~

assembling a bottom part and an intermediary member is assembled to form
[[the]] a housing with a cavity defined therein, the cavity having an opening in the
upper surface of the housing;[[,]] and

attaching a membrane to the housing to cover the opening;
wherein the intermediary member is attached between the bottom part and the membrane and forms at least a part of the cavity; and

wherein at least one of the bottom part and the intermediary member is
formed in a stamping process.

12. (Cancelled)

13. (New) The sensor according to claim 2, wherein the pressure sensing arrangement and the sidewall extend upwardly from the bottom part to an approximately equal height.

14. (New) The sensor according to claim 3, wherein the pressure sensor includes a plurality of connecting pins extending through the housing into portions of the cavity, each of the portions of the cavity into which the connecting pins extend being at least partially formed by a discrete projection extending from a central portion of the aperture.

15. (New) The sensor according to claim 8, wherein at least a portion of the channel extends through the bottom part.

Application No.: 10/538,254
Office Action dated: March 1, 2007
Response to Office Action dated: June 1, 2007

16. (New) The sensor according to claim 8, wherein the intermediary member and the bottom part are joined along matching surfaces.
17. (New) The sensor according to claim 16, wherein the channel extends between the matching surfaces.
18. (New) The sensor according to claim 17, wherein at least a portion of the channel is formed by a groove in at least one of the matching surfaces.
19. (New) The method according to claim 11, further comprising substantially filling the cavity with a pressure-transmitting medium after attaching the membrane to the housing to cover the opening.